

Rewrite claim 47 as follows:

*K2* 47. (Amended) In a [A] scanned probe microscope apparatus having a probe and a scanning head arranged for operative engagement of the surface of a sample for measuring a surface property thereof, the apparatus improvement comprising:

a force sensor operatively located to measure the surface property, the force sensor having an output signal representative of the measured surface property, wherein the force sensor includes:

a pair of capacitive transducers, each transducer including a separate drive plate and a shared pick-up plate movably suspended between the drive plates, wherein said pick-up plate is capable of deflection between each of the drive plates; and

means for transmitting force from a point remote from the pick-up plate to the pick-up plate.

Rewrite claim 56 as follows:

*K3* 56. (Amended) In a [A] high resolution sensor apparatus for use with a scanned-probe microscope having a probe and a scanning head operably arranged for measuring surface properties of a sample, the apparatus improvement comprising:

- a. a sensor element, said sensor element including,
  1. a pair of capacitive transducers, each transducer including a separate drive plate,

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and a shared pickup plate, said pickup plate positioned between said separate drive plates, said drive plates having spaced opposing conductive surfaces when said pickup plate is mounted therebetween, said pickup plate further comprising a conductive central plate suspended by spring means between said drive plates, wherein said central plate is capable of deflection between the conductive surfaces of each of said drive plates;

2. means for mechanically transmitting force from a point remote from said central plate to said central plate; and

- b. means for providing an output signal representative of the surface property being measured, including means for applying an alternating current carrier signal to said pair of drive plates, wherein the signal to one of said drive plates is 180 degrees out of phase with the signal to the other of said drive plates.

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